

Note to Readers: If you need assistance accessing items in this Supplemental Material, please contact ehp508@niehs.nih.gov. Our staff will work with you to assess and meet your accessibility needs within 3 working days.

Table of Contents for Supplemental Material

Long-Term Air Pollution Exposure and Blood Pressure in the Sister Study

Stephanie H. Chan, Victor C. Van Hee, Silas Bergen, Adam A. Szpiro, Lisa A. DeRoo,
Stephanie J. London, Julian D. Marshall, Joel D. Kaufman, and Dale P. Sandler

Figure S1. Mean participant PM_{2.5} concentration. Based on residential location at the time of baseline examination, long-term fine particulate matter (PM_{2.5}) exposure was predicted for each participant for the year 2006 in µg/m³ (Sampson et al. 2013). The map shows the mean concentration of PM_{2.5} for U.S. census tracts with participants.

Figure S2. Mean participant NO₂ concentration. Based on residential location at the time of baseline examination, long-term nitrogen dioxide (NO₂) exposure was predicted for each participant's U.S. census block for the year 2006 in ppb (Novotny et al. 2011). The map shows the mean concentration of NO₂ for U.S. census tracts with participants.

Figure S3. Visualization of interactions for SBP and PM_{2.5} for categorical variables. Circles represent stratum-specific estimates between PM_{2.5} and SBP adjusting for all other Model 5 covariates as main effects with 95% confidence intervals.

Figure S4. Varying degrees of freedom for spatial adjustment with PM_{2.5}. The primary analysis used 10 degrees of freedom, which was varied from 6 to 12 in sensitivity analyses. The fully adjusted model included age, race/ethnicity, household income, education, marital status, working more than 20 hours per week outside the home, perceived stress score, neighborhood socioeconomic status Z score, urban-rural continuum code, thin plate splines for latitude and

longitude, body mass index, waist-to-hip ratio, smoking status, alcohol use, diabetes, hypercholesterolemia, and blood pressure medication use.

Figure S5. Varying degrees of freedom for spatial adjustment with NO₂. The primary analysis used 10 degrees of freedom, which was varied from 6 to 12 in sensitivity analyses. The fully adjusted model included age, race/ethnicity, household income, education, marital status, working more than 20 hours per week outside the home, perceived stress score, neighborhood socioeconomic status Z score, urban-rural continuum code, thin plate splines for latitude and longitude, body mass index, waist-to-hip ratio, smoking status, alcohol use, diabetes, hypercholesterolemia, and blood pressure medication use.

Table S1. Co-pollutant models and blood pressure (mmHg), estimate (95% CI).

References